ABSTRACT OF THE DISCLOSURE

An image compression method is provided including separating an image into a plurality of color channel sub-images processing each of the color channel sub-images by sub-sampling the sub-image transform coding the sub-sampled sub-image decoding the transform-coded image forming a plurality of square groupings of pixels in the decoded image predicting a value for a pixel within each of the x-shaped groupings determining a prediction error for each predicted pixel value within each of the square groupings coding the prediction error forming a plurality of at least partly diamond-shaped groupings of pixels in the decoded image predicting a value for a pixel within each of the diamond-shaped groupings and combining each of the processed color channel sub-images with the coded prediction errors, thereby forming a compressed image.